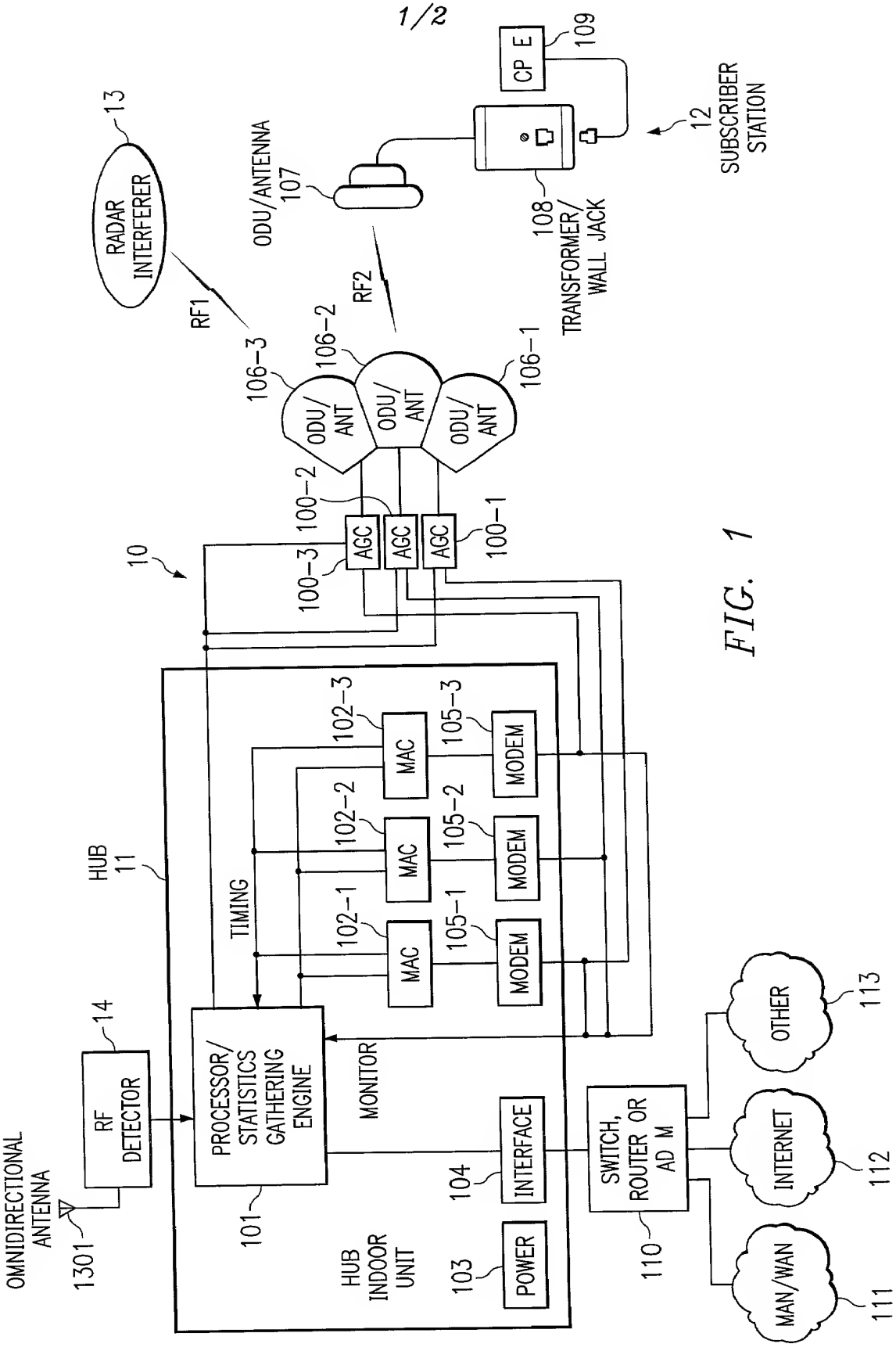

RADAR INTERFERER
13
RF1
RF2
ODU/ANTENNA
107
CP E
109
12
SUBSCRIBER STATION
108
TRANSFORMER/ WALL JACK
106-3
106-2
106-1
ODU/ ANT
ODU/ ANT
ODU/ ANT
100-3
100-2
100-1
AGC
AGC
AGC
10
HUB
11
TIMING
102-3
102-2
102-1
MAC
MAC
MAC
105-3
105-2
105-1
MODEM
MODEM
MODEM
OMNIDIRECTIONAL ANTENNA
1301
14
RF DETECTOR
PROCESSOR/ STATISTICS GATHERING ENGINE
101
MONITOR
HUB INDOOR UNIT
104
INTERFACE
103
POWER
SWITCH, ROUTER OR AD M
110
OTHER
113
INTERNET
112
MAN/WAN
111

FIG. 1

FIG. 2

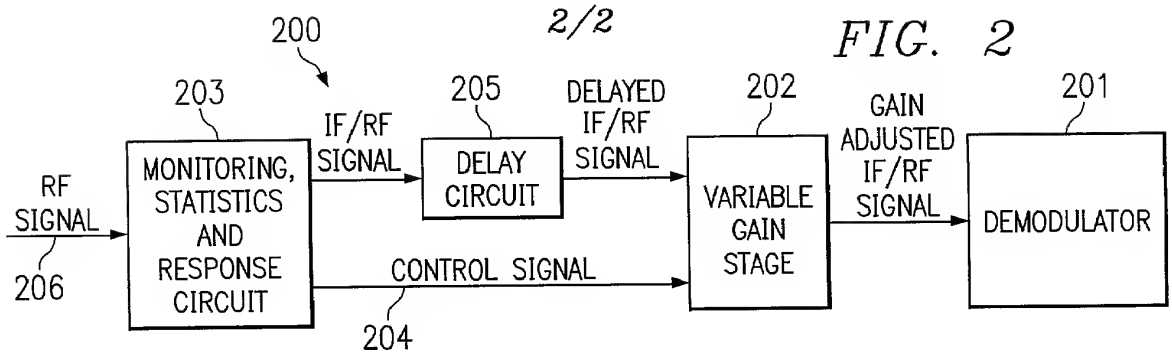
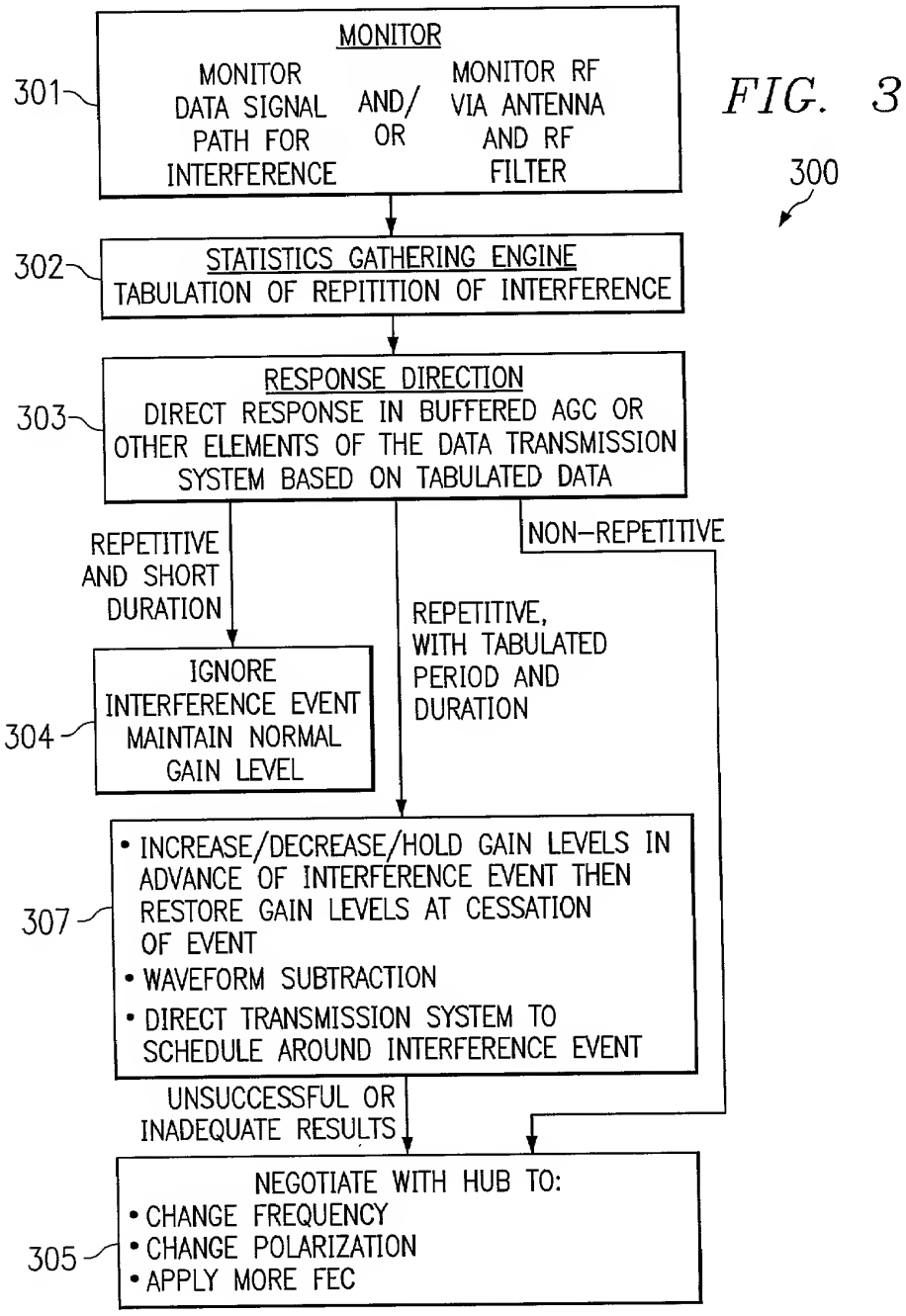

200
203
205
DELAYED IF/RF SIGNAL
202
GAIN ADJUSTED IF/RF SIGNAL
201
IF/RF SIGNAL
RF SIGNAL
MONITORING, STATISTICS AND RESPONSE CIRCUIT
DELAY CIRCUIT
VARIABLE GAIN STAGE
DEMODULATOR
206
CONTROL SIGNAL
204

FIG. 3


300
301
MONITOR
MONITOR DATA SIGNAL PATH FOR INTERFERENCE
AND/ OR
MONITOR RF VIA ANTENNA AND RF FILTER
302
STATISTICS GATHERING ENGINE
TABULATION OF REPITITION OF INTERFERENCE
303
RESPONSE DIRECTION
DIRECT RESPONSE IN BUFFERED AGC OR OTHER ELEMENTS OF THE DATA TRANSMISSION SYSTEM BASED ON TABULATED DATA
REPETITIVE AND SHORT DURATION
REPETITIVE, WITH TABULATED PERIOD AND DURATION
NON-REPETITIVE
304
IGNORE INTERFERENCE EVENT MAINTAIN NORMAL GAIN LEVEL
307
• INCREASE/DECREASE/HOLD GAIN LEVELS IN ADVANCE OF INTERFERENCE EVENT THEN RESTORE GAIN LEVELS AT CESSATION OF EVENT
• WAVEFORM SUBTRACTION
• DIRECT TRANSMISSION SYSTEM TO SCHEDULE AROUND INTERFERENCE EVENT
UNSUCCESSFUL OR INADEQUATE RESULTS
305
NEGOTIATE WITH HUB TO:
• CHANGE FREQUENCY
• CHANGE POLARIZATION
• APPLY MORE FEC